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| APPLICATION N | D. T | TLING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------|----------------------|---------------|-------------------------|---------------------|------------------|
| 09/890,366 | | 07/26/2001 | Man Soo Choi | YPLEE7.001AP 1934 | |
| 20995 | 7590 | 05/09/2003 | | | |
| | | NS OLSON & BE | EXAMINER | | |
| | N STREET ENTH FLO | | COLAIANNI, MICHAEL | | |
| IRVINE, | CA 92614 | | | ART UNIT | PAPER NUMBER |
| | | | | 1731 | |
| | | | DATE MAILED: 05/09/2003 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|---------------------------------|------------------------------------|---|-------------|--|--|--|
| · Office Action Summary | | Application No. | Applicant(s) | | | | |
| | | 09/890,366 | CHOI ET AL. | (. | | | |
| | | Examiner | Art Unit | | | | |
| | | Michael P Colaianni | 1731 | | | | |
| The MAILING DA Period for Reply | TE of this communication app | ears on the cover sheet with the c | orrespondence ad | dress | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | | | | | | | |
| 1) Responsive to co | ommunication(s) filed on 26.5 | <u>luly 2001</u> . | | | | | |
| 2a) This action is FIN | NAL. 2b)⊠ Th | is action is non-final. | | | | | |
| | | | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | | |
| | e pending in the application. | | | | | | |
| 4a) Of the above of | claim(s) is/are withdrav | wn from consideration. | | | | | |
| 5) Claim(s) is | /are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-3</u> is/are rejected. | | | | | | | |
| 7) Claim(s) is | /are objected to. | | | | | | |
| · · · · · · · · · · · · · · · · · · · | re subject to restriction and/o | r election requirement. | | | | | |
| Application Papers | | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abovance. See 37 CER 1.85(a) | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | | | |
| 1. Certified co | pies of the priority document | s have been received. | | | | | |
| 2. Certified co | pies of the priority document | s have been received in Applicati | on No | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | | |
| a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | | | | |
| Attachment(s) | | _ | | | | | |
| Notice of References Cited Notice of Draftsperson's Part Information Disclosure State | | 5) Notice of Informal | (PTO-413) Paper No. Patent Application (PT | | | | |
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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Huber et al. DE 3206176.

Huber et al. teach depositing glass soot on a perform using a burner, while, simultaneously exposing the soot to laser light that causes the soot to melt together (Fig. 1, English translation of the abstract, page 7, lines 7-25, claims 1 and 10). Moreover, the ejection of the numerous particles of heated glass soot from the burner would inherently produce an agglomeration of the particles around one another such that some of the particles serve as nuclei during the agglomeration. Also, the laser light is clearly shown to be injected through the soot plume as it is deposited (Fig. 1, ref. no. 5 and 4 and abstract). Also, Huber teaches that the laser light is such that the glass absorbs it in order to melt the glass material (page 7, lines 21-25). Thus, it is inherent that the glass soot in the plume would also absorb the laser light passing through it, thereby forming agglomerates of flame and on the deposition surface 3.

While the Examiner believes that Huber et al. inherently teaches the limitations of applicant's claims denoted above, in the alternative, it would have been *prima facie*

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obvious at the time the invention was made that the laser light injected into the soot plume simultaneously with the burner's production of the soot would cause the soot to agglomerate with Huber et al.'s method of depositing soot to form a glass preform because Huber et al. teach that the laser is chosen such that the glass material absorbs it and thus is heated by the laser (page 7, lines 21-25) which means that the soot passing through the laser light would be heated to a point at which it melts together to form agglomerates. Also, Huber et al. teaches that the laser is applied simultaneously with the burner deposition of the soot which means that the soot is obviously exposed to the laser light prior to deposition on the surface 3.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Colaianni whose telephone number is 703-305-5493. The examiner can normally be reached on Monday to Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin, can be reached on (703) 308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7115.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Michael P Colaianni Primary Examiner Art Unit 1731

MICHAEL COLAIANNI PRIMARY EXAMINER